



Occupational Outlook in Context



Lately we have been fielding some very challenging questions about our occupational projections. Those questions, to put it bluntly, are about the accuracy of the projections. Here's an example: "Your projections say there should be 1,030 openings this year for carpenters. Are your calculators broken, or are you just completely out of touch with the realities of today's economy?" No, our calculators aren't broken and no, we're not out of touch. But apparently some explanation is in order.

The first thing to clear up is the misinterpretation of the data. What the projections data actually say is that between 2006 and 2016 we expect to see an average of 1,030 openings per year for carpenters. Meaning, in some years Utah could see more than 1,030 openings and in others less, but over the ten-year period the average should be about 1,030. Averages are intentionally used to report the projection model's results because the model is not designed to estimate the exact employment each year.

At this point, you may be asking yourself why that wouldn't be the goal of the model. To answer that, a quick overview of how the model works is in order. Essentially, the model uses

economic trends from the past, along with what is currently known about the economy, to estimate the growth of an occupation over a ten-year period. Amassing all that economic data gives us an abundance of information to work with, but it does not account for everything in the economy that could affect the demand for workers. When an economic variable can't be measured, we can't include it in the model and therefore it won't be reflected in the results. Natural disasters are a good example of events that can have a profound effect on the economy, but can't be predicted in either timing or scope. Because we can't predict such events, there is no way for the model to pinpoint the exact employment demand in any occupation.

Thus, we take what data we do have, which indeed accounts for a large majority of what generally affects the economy and the demand for workers, and we project a trend line into the future—in this case to 2016. Notice it's a trend line, and not a trend curve. Does the economy move in a straight line? Of course not; it cycles. (The term often used is "the business cycle"; you are undoubtedly aware that we are currently in the contractionary portion of a cycle.) The projected trend line represents the average, and should

cross through the curved line that will represent the cycles of the economy that occur up to 2016.

Another important point to keep in mind is that we don't sit on these projections until 2016. We update them every two years. Next year when we prepare the 2008-2018 projections we will have new data (i.e. more data on the recession) that will be incorporated into the model.

Should the fact that the openings data is not meant to be precise, or the fact that the projections will change every two years, lead to the conclusion that the data is too confusing or inaccurate to be used in career decision making? Definitely not. It just needs to be used correctly. The right thing to do is not think of the numbers in absolute terms. Instead, focus on the comparison to other occupations, or the same occupation in different regions, or even

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Utah 2006-2016 Top "Five Star" Jobs by Training Level

Bachelor's Degree or Higher	Annual Average Openings 2006-2016	Median Hourly Wages
Chief Executives	150	N/A
Computer and Information Scientists, Research	N/A	N/A
Computer and Information Systems Managers	100	\$43.40
Computer Software Engineers, Systems Software	360	\$37.60
Dentists, General	120	\$55.10
Engineering Managers	70	\$48.40
Engineering Teachers, Postsecondary	60	\$90,610.00*
Family and General Practitioners	60	\$0.00
Financial Managers	160	\$39.40
Health Specialties Teachers, Postsecondary	130	\$112,110.00*
Lawyers	300	\$44.90
Marketing Managers	60	\$38.50
Pharmacists	110	\$48.90
Physician Assistants	40	\$40.20
Sales Managers	140	\$41.60
More than High School, Less than a Bachelor's Degree		
Cardiovascular Technologists and Technicians	10	\$21.50
Dental Hygienists	100	\$30.70
Environmental Science and Protection Technicians	20	\$20.40
Industrial Engineering Technicians	40	\$25.50
Medical Equipment Repairers	60	\$28.50
Occupational Therapist Assistants	10	\$21.00
Paralegals and Legal Assistants	70	\$20.30
Registered Nurses	980	\$26.40
Respiratory Therapists	40	\$25.10

* Contract Wage

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the total number of workers in the economy. Also, remember that the projections are long-term. The data is not intended to be used for short-term planning or decision-making.

If your question is about what you should do today, you won't find the answer in the projections. However, if you're doing long-term career planning, the projections are a powerful piece of information to use in that process. 

You can find the projections data for individual occupations by going to:

<http://jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do>

Or for a full list of occupations, go to: <http://jobs.utah.gov/opencms/wi/pubs/publicat.html>

Choose a region under the Job Trends bullet.

Utah 2006-2016 Top "Five Star" Jobs by Training Level Continued



Experience in a Related Occupation or Long Term On-the-Job Training	Annual Average Openings 2006-2016	Median Hourly Wages
Claims Adjusters, Examiners, and Investigators	80	\$26.30
Electrical Power-Line Installers and Repairers	90	\$25.30
Electricians	490	\$20.20
First-Line Supervisors/Managers of Production and Operating Workers	250	\$22.30
Food Service Managers	160	\$22.50
Industrial Machinery Mechanics	150	\$20.70
Industrial Production Managers	80	\$37.50
Plumbers, Pipefitters, and Steamfitters	300	\$21.20
Purchasing Agents	130	\$22.80
Sales Representatives, Nontechnical	850	\$23.40
Sales Representatives, Technical	310	\$30.00
Sheet Metal Workers	140	\$20.40
Supervisors/Managers of Construction Trades and Extraction Workers	490	\$23.70
Supervisors/Managers of Mechanics, Installers, and Repairers	190	\$27.00
Supervisors/Managers of Non-Retail Sales Workers	230	\$26.50
Moderate and Short Term On-the-Job Training		
Advertising Sales Agents	70	\$19.30
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	30	\$18.60
Bookkeeping, Accounting, and Auditing Clerks	780	\$13.60
Correctional Officers and Jailers	110	\$17.40
Drywall and Ceiling Tile Installers	310	\$16.50
Maintenance and Repair Workers	290	\$14.90
Operating Engineers	300	\$16.90
Painters, Construction and Maintenance	420	\$14.60
Pharmacy Technicians	200	\$14.10
Postal Service Mail Carriers	120	\$21.50
Roofers	120	\$16.60
Truck Drivers, Heavy and Tractor-Trailer	990	\$17.30

Source: Utah Department of Workforce Services, June 2008.